

Course Syllabus

MUSC 1327 (3:3:1)

Audio Engineering I

Commercial Music Program

Creative Arts Department

Technical Education Division

Levelland Campus

South Plains College

Creative Arts Department - South Plains College - Levelland Campus

Course Syllabus

Course Title: *Audio Engineering I*

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Office *As posted.*

Hours:

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I. **General Course Information:**

- A. **Description:** This course provides an overview of the modern recording studio and related personnel. Topics include basic studio electronics and acoustic principles, wave form analysis, microphone concepts and miking techniques, studio set up and signal flow, recording console theory, signal processing concepts, recorder principles and operation, and an overview of mixing and editing.
- B. **Course Learning Outcomes:** Identify acoustic and electronic concepts; describe waveform properties; explain microphone characteristics and discuss their placement; describe studio set-up and signal routing; explain console and recording machine operation techniques; and discuss basic studio production procedures
- C. **Course Competencies:** To receive a passing grade for this course a student must be able to master at least 60% of the skills and knowledge demonstrated throughout the semester. Students will demonstrate knowledge of recording terminology and recording concepts presented in the texts and PowerPoint presentations through examinations and quizzes. Students will demonstrate proficiency in the basic operations of a DAW-based recording system through projects and assignments.
- D. **Academic Integrity:** It is the aim of the faculty of South Plains College to foster a spirit of complete honesty and a high standard of integrity. The attempt of any student to present as his or her own work which he or she has not honestly performed is regarded by the faculty and administration as a most serious offense and renders the offender liable to serious consequences, possibly suspension. Students should refer to the SPC General Catalog, pg.22-23, regarding consequences for cheating and plagiarism (see "Academic Integrity" and "Student Conduct" sections).
- E. **SCANS:** This course includes *all* SCANS competencies C1 through C20. Foundation skills include F1, F2, and F5 through F17. ***A key to these codes is found on the last 4 pages of this syllabus.***
- F. **Verification:** This course is a requirement for the Commercial Music A.A.A. Degree and the Video Production Technology Certificate. It is also an option for any Commercial Music Certificate. This course does not fulfill the prerequisite for MUSC 2427 Audio Engineering II unless the student also takes MUSC 2101 Audio Engineering Practices.

II. ***Specific Course/Instructor Requirements:***

- A. **Textbook and Other Materials** *Pro Tools 101: Pro Tools Fundamentals 1*, Frank D. Cook, and *Audio Engineering 1*, Timothy Dittmar
- B. **Attendance Policy:** Absences and late penalties will be assessed as part of the "Professionalism Grade" (see grading policy). Missing class or arriving late is unprofessional and that type of behavior is not tolerated in professional work environments. Unavoidable absences will be considered at the instructor's discretion, but the student should make every effort to notify the instructor in such a case. **Assignments or tests missed can only be made up if arrangements are made with the instructor prior to the absence. Call or email the instructor as soon as you know that you are not going to be able to attend.** This is a professional courtesy and is what an employer would expect of you. **Excessive Absences/Drops:** In order to avoid a grade of "F" appearing on his/her transcript, the student should formally withdraw from the class if he/she no longer plans to attend. The instructor may drop a student after 3 absences.
- C. **Assignment Policy:** Students will be assigned to complete three Pro Tools assignments. Work will be performed both in and outside of class. Reading assignments from the text or supplied handouts will be given in class. Students will be expected to read the assignment for understanding before the next class meeting. Students will complete study guides and be quizzed and tested on their knowledge and understanding of the written material. Students will be assigned to record a basic project in Pro Tools and complete a mix that will be turned in on CD or other electronic format.
- D. **Grading Policy/Procedure:**
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|--|---------|
| Projects | 200 pts |
| Assignments | 300 pts |
| Reviews. | 200 pts |
| Tests-2 (1 Midterm -1 Comprehensive Final) | 200 pts |
| Professionalism* | 100 pts |
- *Each student will start with 100 professionalism points. This constitutes 10% of the total grade. Points will be deducted for behavior or work that is deemed by the instructor to be unprofessional. This includes but is not limited to: unapproved absences, lateness, failure to turn in assignments on time, sloppy or substandard work, uncooperative or negative attitude, disrespectful treatment of instructor or fellow students, inappropriate behavior, inappropriate attire, failure to turn off cell phones, misuse or abuse of equipment, etc. The severity of the offense will determine the amount of points taken off and will be solely at the instructor's discretion. Repeated offenses will result in heavier penalties.
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|---|----------------------|--|
| A = 90-100% | Excellent | 4 grade points per semester hour. |
| B = 80-89% | Good | 3 grade points per semester hour. |
| C = 70-79% | Average | 2 grade points per semester hour. |
| D = 60-69% | Below Average | 1 grade point per semester hour. |
| F = 0-59.9% | Failing | 0 grade points per semester hour. |
| I = Incomplete | | Not Computed |
| W = Student Initiated Withdrawal | | Not Computed |
| X = Administrative Withdrawal | | Not Computed |

- E. **Special Requirements: All projects and assignments must be completed to minimum standards as outlined in the accompanying instructions. Failure to turn in projects or assignments to minimum standards will result in rejection of the work and a grade of zero will be given. Projects and assignments with a hands-on component must meet at least a 70% proficiency rating.**

III. **Course Outline:**

- A. Overview of the Recording Process
- B. Overview of the Studio and Acoustics
- C. Overview of Microphones
- D. Overview of Careers in the Recording Industry
- E. Introduction to Pro Tools Software and Multi-track Recording
- F. Introduction to Signal Flow in the recording chain
- G. Introduction to Equalization
- H. Introduction to Compression
- I. Introduction to Effects Processing
- J. Introduction to Mixing
- K. Introduction to Editing
- L. Introduction to Stereo Audio File Creation

IV. **Accommodations**

South Plains College strives to accommodate the individual needs of all students in order to enhance their opportunities for success in the context of a comprehensive community college setting. It is the policy of South Plains College to offer all educational and employment opportunities without regard to race, color, national origin, religion, gender, disability or age (SPC Equal Opportunity Policy--General Catalog).

In this class, the teacher will establish and support an environment that values and nurtures individual and group differences and encourages engagement and interaction. Understanding and respecting multiple experiences and perspectives will serve to challenge and stimulate all of us to learn about others, about the larger world and about ourselves. By promoting diversity and intellectual exchange, we will not only mirror society as it is, but also model society as it should and can be.

Disability Statement-Students with disabilities, including but not limited to physical, psychiatric, or learning disabilities, who wish to request accommodations in this class should notify the Disability Services Office early in the semester so that the appropriate arrangements may be made. In accordance with federal law, a student requesting accommodations must provide acceptable documentation of his/her disability to the Disability Services Office. For more information, call or visit the Disability Services Office through the Guidance and Counseling Centers at Reese Center (Building 8) [716-4606](tel:716-4606), or Levelland (Student Services Building) [716-2577](tel:716-2577).

V. **SCANS Key**

Competencies

- C1 Time Management**
 - Using lab time and completing project in time allotted
 - Completion of projects and assignments by deadline
- C3 Material/Facility Management**
 - Using available facilities to complete task in time allotted
 - Following lab rules to facilitate organized sessions
 - Organizing recorded material and managing storage
- C4 Working with Others**
 - Interfacing between other artists
- C5 Study/Evaluation Skills**
 - Using technical manuals proficiently
 - Critical thinking demonstrated by adapting technology to task
 - Demonstrating hands-on operation of equipment
- C6 Organizing and Maintaining Information**
 - Note taking
 - Project documentation
 - Editing projects/storing them on hard drive and other media
- C7 Interpreting and Communication Information**
 - Communicating with musicians on sessions
- C8 Computer Usage**
 - Using Digital Audio Workstations for project production
- C9 Being a Team Member**
 - Working toward one goal with others in a recording session
- C11 Showing Ability to Serve Industry Clientele**
 - Producing professional quality recordings
- C12 Exercising leadership**
 - Leading recording sessions
 - Recording sessions, arranging talent
- C13 Making Decisions**
 - Choosing which production techniques to use on projects
 - Creating appropriate mixes
 - Choosing and applying the appropriate effects
 - Allocating enough time for each phase of the project
- C14 Developing a Sense of Cultural Diversity**
 - Working with artists in the studio
 - Recording many different styles of music
 - Working with musicians of diverse heritage
- C15 Understanding Social, Organizational and Technological Systems**
 - Demonstrating an understanding of the music industry
 - Understanding signal flow in audio systems
 - Understanding studio psychology
 - Understanding the flow of information within a session
- C16 Monitoring and Correcting Performance**
 - Doing recallable mixes which can be retrieved/corrected
 - Troubleshooting signal flow in the DAW
 - Analyzing and redoing mixes

- Assuming the role of producer
 - Critiquing one's own projects
- C17 Improving or Designing Systems**
- Experimentation with effects devices
- C18 Selecting the Appropriate Technology**
- Choosing the proper microphone for the application
 - Choosing the appropriate signal processors, effects
- C19 Applying Appropriate Technology to Tasks**
- Creating a usable demo project
- C20 Maintaining and Troubleshooting Technology**
- Receiving hands-on experience in the proper use, handling, and maintenance of audio equipment

Foundation Skills

- F1 Reading – locates, understands, and interprets written information**
- Reading the assignments from the texts and applying the information to recording projects
- F2 Writing - communicates thoughts, ideas, information in written form**
- Writing answers on written tests
- F3 Arithmetic - basic computations, numerical concepts**
- Calculating basic acoustical functions such as wavelength or period.
- F5 Listening - receives, interprets, responds to verbal messages**
- Listening to lectures, following verbal instructions
 - Following the instructions of the instructor while performing operations on the DAW
 - Critical listening to recordings and mixes
- F6 Speaking – organizes ideas and communicates orally**
- Effectively running a recording session
- F7 Creative Thinking – generates new ideas**
- Creative use of effects
 - Unusual miking techniques
 - Songwriting
- F8 Decision Making—specifies goals, assesses risk, makes best choice**
- Working within time restrictions
 - Following instructions with regard to project submissions
- F10 Seeing Things in the Minds Eye—organizes/processes symbols, etc.**
- Imagining how the finished recording will sound
- F11 Knowing How to Learn - acquire and apply knowledge/skills**
- Operating new or unfamiliar equipment
- F12 Reasoning - discovery and application of underlying principles**
- Applying recording techniques to different instrumentation, acoustical environments and different styles of music
- F13 Responsibility - perseverance toward goal attainment**
- Turning in quality recording project on time

- Running a recording session
- F14 Self-esteem – believes in own self worth/has a positive view of self**
 - Handling musicians in the lab
 - Turning in properly formatted documents
 - Turning in projects that garner favorable critiques from peers
- F15 Sociability - friendliness, adaptability, empathy, understanding, etc.**
 - Interacting with other students in a recording session
- F16 Self-management - assesses self, sets goals, monitors progress**
 - Operating recording equipment with confidence and prudence
 - Creating a recording that reflects the desires of others
 - Attending class
 - Reading/studying, demonstrating ability on tests and projects
- F17 Integrity/Honesty – chooses ethical courses of action**
 - Utilizing production values compatible with the industry
 - Keeping production projects within budget
 - Using the lab properly
 - Properly accomplishing objectives of courses as required without asking for extensions
 - Does not pass off other's work as one's own